

**THAT WHICH IS CLAIMED IS:**

1. A heated windshield wiper assembly comprising:
  - a) a frame structure for connection to the wiper arm of a vehicle, said frame structure having an elongated blade support member;
  - b) a blade member having a tubular bore extending along its length and having a top portion for insertion into said blade support member;
  - c) a heating element positioned in said tubular bore of said blade member;
  - and
  - d) an electrical connection structure connected to said heating element and having means for connecting to the power source of the vehicle, said electrical connection structure having a thermostat for activating said heating element.
2. The heated windshield wiper assembly of **Claim 1**, wherein said tubular bore of said blade member has a cross-sectional configuration selected from the group of configurations consisting of a circle, a diamond, rectangle, oval, triangle, square and a polygon.
3. The heated windshield wiper assembly of **Claim 2**, wherein said tubular bore has at least one elongated leg member extending outwardly therein for engaging and securing said heating element.

4. The heated windshield wiper assembly of **Claim 3**, wherein said heating element is comprised of a nonconductive sheath and an elongated flexible wire looped therethrough said flexible wire having a predetermined resistance.
5. The heated windshield wiper assembly of **Claim 4**, wherein said blade member is constructed of silicone rubber and wherein said heating element is frictionally held within said tubular bore.
6. The heated windshield wiper assembly of **Claim 1**, wherein said frame structure further comprises a wiper arm and wherein said thermostat is attached thereto.
7. The heated windshield wiper assembly of **Claim 1**, wherein said thermostat is a bimetal thermostat having an activation temperature between 34-43°F.
8. The heated windshield wiper assembly of **Claim 1**, further comprising a fuse device, a plurality of tie-down members, connecting wires, a ring connector, a butt connector and a tap connector, utilized for an aftermarket wiper assembly structure.
9. The heated windshield wiper assembly of **Claim 8**, wherein said fuse is a five amp fuse, wherein said heating element is constructed of a nickel chrome composition to heat said blade member in a temperature range of approximately 100-350°F, wherein said electrical connection structure further comprises a

polymeric sheathing, wherein said blade members have a length ranging from 16 to 28 inches and wherein an adapter device is provided for connecting said frame structure to the wiper arm of a vehicle.

10. A heated windshield wiper assembly comprising:

- a) a blade member, said blade member having a bore therein and a predetermined configuration;
- b) a frame structure constructed and arranged to releasably receive said blade member;
- c) a heating element constructed and arranged to fit into said bore in said blade member;
- d) a thermostat device constructed and arranged to read the ambient temperature and activate said heating element at a predetermined temperature; and
- e) an electrical connection structure incorporating said thermostat device therein, wherein said electrical connection structure is constructed and arranged to connect said assembly to the electrical system of the vehicle and wherein said electrical connection structure is constructed and arranged to be connected to said heating element.

11. The heated windshield wiper assembly of **Claim 10**, wherein said predetermined configuration of said blade member comprises a cross-section having a T-shaped top portion and a V-shaped bottom portion, wherein said T-shaped top portion is

constructed and arranged to be matingly and releasably attached to said frame structure.

12. The heated windshield wiper assembly of **Claim 10**, wherein said bore of said blade member has a cross sectional configuration selected from the group of cross-sectional configurations consisting of circular, diamond, rectangular, oval, triangular, square, and polygonal.
13. The heated windshield wiper assembly of **Claim 10**, wherein said thermostat device is a bimetal thermostat and wherein said predetermined temperature at which said thermostat device activates said heating element is a range of approximately  $37-40^{\circ}\text{F} \pm 3^{\circ}\text{F}$ .
14. The heated windshield wiper assembly of **Claim 10**, wherein said blade member is made of a silicone rubber composition.
15. The heated windshield wiper assembly of **Claim 10**, wherein said heating element is comprised of a wire and an insulative protective sheath.
16. The heated windshield wiper assembly of **Claim 15**, wherein said wire is made of nickel chromium and said protective sheath is made of PTFE.

17. A heated wiper assembly for a vehicle having a wiper arm, comprising:
- a) a blade body member held to a blade support, said blade body member having a top portion and a bottom wiper portion, said top portion being T-shaped for matingly fitting with said blade support and said bottom wiper portion being V-shaped and containing an elongated tubular aperture;
  - b) a heating element for placement in said elongated tubular aperture, wherein said heating element is comprised of a heating wire and a protective sheath;
  - c) a frame structure for mounting to the vehicle's wiper arm, wherein said frame structure is in communication with said blade support;
  - d) an adapter structure for attaching the frame structure to the wiper arm; and
  - e) an electrical connection structure for electrical connection of said assembly to said vehicle, said electrical connection structure including a thermostat device that activates said heating element at a predetermined temperature.
18. The heated wiper assembly of **Claim 17**, wherein said elongated tubular aperture contains at least one rib member.
19. The heated wiper assembly of **Claim 17**, wherein said elongated tubular aperture has a cross sectional configuration selected from the group of cross-sectional configurations consisting of circular, diamond, rectangular, oval, triangular, square, and polygonal.

20. The heated wiper assembly of **Claim 17**, wherein said blade body member is made of silicone rubber.
21. The heated wiper assembly of **Claim 17**, wherein said protective sheath is made of PTFE tubing and said heating wire is made of nickel chrome wire.
22. The heated wiper assembly of **Claim 17**, wherein said thermostat device is a bimetal thermostat and wherein said predetermined temperature at which said thermostat device activates said heating element is approximately  $37-40^{\circ}\text{F} \pm 3^{\circ}\text{F}$ .
23. The heated wiper assembly of **Claim 17**, wherein said assembly further comprises a fastening device for attaching wires of the heating element to various parts of the vehicle.